

In the Remarks

The Applicants have amended Claim 1 to recite that the differential Young's modulus at 3-10% extension is no more than 6.6 cN/dtex and the CF value is 1-30. The CF value was contained in original Claim 11, which has now been cancelled. Claim 12 has been amended to correct the dependency. Support for the 6.6 cN/dtex limitation may be found in Table 1 on page 25 of the Applicants' Specification at Example 4, wherein the cN/dtex value is stated as being 6.6. It is well accepted that selecting a value supported by an Example within a broader range supported elsewhere in the Specification provides ample support for the above differential Young's modulus.

Claim 15 has been amended to recite an additional step of an interlacing treatment to make the CF value 1-30. Support may be found on page 8 at line 30, original Claim 11 and elsewhere.

The Applicants acknowledge the rejection of Claims 1 – 14 under 35 U.S.C. §112, second paragraph. As noted above, the Applicants have amended Claim 1 to add the structural limitation of the CF value being 1-30. The Applicants respectfully submit that this structural limitation provides the appropriate structural limitation sought in the Official Action and assists in differentiating Claim 1 over Fujimoto for reasons set forth in detail below.

Moreover, the Applicants respectfully submit that it is well accepted that physical characteristics such as Young's modulus, elastic recovery, CF value and the like, coupled with structure such as a polyester multi-filament yarn comprising polytrimethylene terephthalate filaments satisfies the requirements of §112. Withdrawal of the rejection is respectfully requested.

Turning now to the merits, the Applicants acknowledge the rejection of Claims 1 – 13 under 35 U.S.C. §§102 and 103 based on Fujimoto. However, Fujimoto fails to disclose, teach or suggest a minimum value of a differential Young's modulus at 3-10% extension of no more than 6.6 cN/dtex

and a CF value of 1-30. Careful scrutiny of the entire Fujimoto document reveals that such disclosure does not exist in Fujimoto. For this reason alone, the Applicants respectfully submit that Fujimoto is inapplicable under both of §§102 and 103.

The Applicants enclose an English translation of an Experimental Report of Jinichiro Kato, one of the named inventors in Fujimoto to further support patentability. The Experimental Report was submitted in the Taiwan Patent Office with a Chinese translation by the Applicant (Asahi Kasei Corp.) of WO 99/27168/EP '422 to Fujimoto to support their argument in an opposition proceeding to the Taiwanese counterpart of the present application. The independent claim of the opposed Taiwan counterpart of the application was limited to "a minimum value of a differential Young's modulus at 3-10% extension is no more than 10 cN/dtex". The opponent submitted the experimental report in which they certified that the yarn obtained in Example 5 of Fujimoto had a minimum value of a differential Young's modulus at 3-10% elongation of 8 cN/dtex.

The English translation of the Experimental Report reveals that the yarn obtained in Example 5 of Fujimoto has a minimum value of a differential Young's modulus at 3-10% elongation of 8 cN/dtex. Thus, the Applicants respectfully submit that the Applicants of Fujimoto has himself certified that the minimum value of a differential Young's modulus at 3-10% extension is substantially in excess of the maximum 6.6 cN/dtex as recited in Claim 1. The Applicants respectfully request withdrawal of the rejection based on Fujimoto alone.

Claim 14 is rejected under 35 U.S.C. §103(a) as being unpatentable over Fujimoto in view of Matsuo (JP 11-100747). The Applicants respectfully submit that even if the hypothetical combination of Matsuo with Fujimoto with respect to Claim 14 is made, the resulting combination still fails to teach or suggest the minimum value of a differential Young's modulus at 3-10%

extension of no more than 6.6 cN/dtex. Withdrawal of the rejection based on the hypothetical combination of Matsuo with Fujimoto is respectfully requested.

Claims 15 – 23 are rejected under U.S.C. §103(a) as being unpatentable over Fujimoto in view of Schippers. However, Schippers also does nothing to cure the deficiencies set forth above with respect to Fujimoto. Accordingly, even if the hypothetical combination is made, the resulting combination still fails to teach or suggest the minimum value of a differential Young's modulus of 3-10% extension of no more than 6.6 cN/dtex. Moreover, there is utterly nothing in either of Fujimoto or Schippers that teaches or suggests an interlacing treatment subsequent to a relaxation heat treatment that would cause the yarn to have a CF value of 1-30.

The Applicants invite the Examiner's attention to Fig. 2, which shows a method employing an interlacing nozzle in the relaxation heat treatment. By use of the interlacing treatment, it is possible to lower the yarn tension prior to interlacing so that, by utilizing the shrinkage stress produced by the heat of the second heated roller 5, it is possible to perform a relaxation heat treatment between the second heated roller 5 and the interlacing nozzle 7. As a consequence, the relaxation factor can be controlled by varying the actuating air pressure of the interlacing nozzle.

Thus, the CF value is quite important for a polyester multifilament yarn comprising polytrimethylene terephthalate filament to decrease yarn breakage since friction with metals or ceramics at any process point of yarn production and weaving is too high because of the molecular structure. The Applicants respectfully request withdrawal of the rejection of Claims 15 – 23 based on the hypothetical combination of Schippers with Fujimoto.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now
in condition for allowance, which is respectfully requested.

Respectfully submitted,



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